

REMARKS

Claims 1-16 and 18-30 are pending in the Application. Claim 1 stands objected to and claims 1-30 stand rejected by the Office Action mailed April 14, 2008. Claims 1, 16, and 18 are amended by this response, and claim 17 is cancelled in this response. Claims 1, 11, 16, and 24 are independent claims, while claims 2-10, 12-15, 18-23, and 25-30 depend either directly or indirectly from independent claims 1, 11, 16, and 24, respectively.

The Applicants respectfully request reconsideration of claims 1-16 and 18-30 in light of the following remarks.

Objections to Claims

Claim 1 stands objected to due to an informality regarding a comma located in the phrase "...in the electronic device are provisioned during provisioning of a number assignment module (NAM) in the electronic device, by the network". The Office Action advises Applicants to either delete the comma in the phrase or add a comma after the term "provisioned." Claim 1 is presently amended to include a comma after "provisioned." Therefore, Applicants respectfully request that the objection to claim 1 be withdrawn. Applicants further respectfully submit that this amendment does not narrow the scope of claim 1, and does not give rise to any estoppel.

Rejection of Claims Under 35 U.S.C. §103

Claims 1-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Moles et al.*, U.S. Patent Number 6,615,038 (hereinafter "Moles") in view of Shah, U.S. Patent No. 6,029,065 (hereinafter "Shah '065"). For at least the reasons discussed below regarding specific groups of claims, Applicants respectfully submit that Moles and Shah '065, either alone or in combination, do not teach, suggest, or otherwise render obvious the presently claimed subject matter. Further, Applicants respectfully submit

that the Office Action does not present a *prima facie* case of obviousness for claims 1-10.

Rejection of Claims 1-10

Applicants respectfully submit that Moles in view of Shah '065 does not render claims 1-10 obvious. Independent claim 1 recites a mobile electronic device network employing provisioning techniques for updating electronic devices, the network comprising, *inter alia*, "...wherein one or more parameters specific to updating of firmware and software in the electronic device are provisioned, during provisioning of a number assignment module (NAM) in the electronic device, by the network." Applicants respectfully submit that Moles and Shah '065, either alone or in combination, do not render such a mobile electronic device network obvious.

As an initial matter, it is not entirely clear to Applicants if the Office Action is asserting that Moles teaches "...wherein one or more parameters specific to updating of firmware and software in the electronic device are provisioned, during provisioning of a number assignment module (NAM) in the electronic device, by the network." For example, the April 14 Office Action states, "Moles does disclose[] a network wherein...(i.e. one or more parameters specific to updating of firmware and software in the electronic device are provisioned during provisioning of a number assignment module in the electronic device by the network." (Office Action at p. 3-4). However, the Office Action then goes on to state, "Moles, [h]owever, does not specifically disclose a network comprising an update service in the electronic device...and wherein one or more parameters specific to updating of firmware and software in the electronic device are provisioned during provisioning of a number assignment module." (*Id.* at p. 4).

In the event the Office Action is asserting that Moles discloses that aspect of claim 1, Applicant respectfully submits that Moles does not teach or suggest "...wherein one or more parameters specific to updating of firmware and software in the electronic device are provisioned during provisioning of a number assignment module (NAM) in the electronic device, by the network." The Office Action references Moles at Fig. 2-4

and col. 6, lines 28-39 as teaching this aspect of the presently claimed subject matter (see Office Action at p. 3-4: "(i.e., one or more parameters specific to updating of firmware and software in the electronic device are provisioned during the provisioning of a number assignment module in the electronic device by the network).") Col. 6, lines 28-39 of Moles reads as follows:

As will be explained below in greater detail, when an unprovisioned mobile station, such as MS 112, accesses wireless network 100 (via BS 101), then BS 101 and/or MSC 140, using the handset data in HLR 155, identifies MS 112 as an unprovisioned handset and performs an over-the-air (OTA) service provisioning of MS 112. Either during the service provisioning or at a subsequent time, mobile station configuration server 160 gathers configuration data from MS 112 and stores it in a configuration record in a database. Thereafter, mobile station configuration server 160 may from time to time transmit mobile station updates to MS 112 to correct software defects or to add new features.

Applicants respectfully submit that such a teaching does not teach or suggest the presently claimed subject matter, and is in fact quite different. For example, claim 1 recites "...wherein one or more parameters specific to updating of firmware and software in the electronic device are provisioned, during provisioning of a number assignment module (NAM) in the electronic device, by the network." (emphasis added). The cited portion of Moles is silent with regard to provisioning of one or more parameters specific to updating of firmware and software in the electronic device, let alone to such a provisioning during provisioning of a NAM.

Even assuming, *arguendo*, that a NAM were provisioned during the "service provisioning" of Moles, Moles does not teach or suggest provisioning one or more parameters specific to updating of firmware and software in the electronic device during such a provisioning. Instead, Moles merely states that "[e]ither during the service provisioning or at a subsequent time, mobile station configuration server 160 gathers configuration data from MS 112 and stores it in a configuration record in a database." Merely gathering "configuration data" from a mobile station and "from time to time

transmit[ting] mobile station updates” does not teach or suggest provisioning one or more parameters specific to updating of firmware and software in the electronic device, let alone performing such provisioning during provisioning of a NAM. As an initial matter, “configuration data” does not disclose “one or more parameters specific to updating of firmware and software.” Moreover, the “configuration data” of Moles is not provisioned to the electronic device, but instead collected from a mobile station (MS 112). (See also Moles at 6:40-44: “Advantageously, HLR 155 only needs to store the minimum amount of data to authenticate MS 112 and to establish a connection to the provisioning server. All of the remaining data needed for the network to determine upgrades information is stored in mobile station configuration server 160.”; emphasis added). Thus, even if somehow the “configuration data” of Moles did disclose one or more parameters specific to updating of firmware or software in the electronic device, the “configuration data” of Moles is not provisioned to the electronic device, but is instead gathered from MS112 and stored in a separate server (i.e. mobile station configuration server 160; see Moles at Fig. 2). Thus, Applicants respectfully submit that the cited portion of Moles does not teach or suggest “...wherein one or more parameters specific to updating of firmware and software in the electronic device are provisioned, during provisioning of a number assignment module (NAM) in the electronic device, by the network.”

Applicants further respectfully submit that Shah '065 does not provide a teaching or suggestion of at least that aspect of claim 1. The portion of Shah '065 cited by the Office Action in rejecting claim 1, namely col. 8, lines 5-48, reads as follows:

The mobile phone is pre-programmed with a service option for changing or adding extended subscriber features, which includes assignment of an Extended Feature (EF) number. The mobile phone will also have one or more extended features change codes (EFCC's) in its memory. The network, whether it is the mobile's home network or a visited network, possesses means for determining whether a mobile phone is OTAPA capable. Note that the visited network may establish OTAPA support for a particular mobile station using IS-41 communications with the home

network, however, protocol for the transfer of such information will need to be added to the IS-41 standard.

In the OTAPA procedure, the network base station sends a General Page Message to the mobile phone using the EF number. After first verifying its identity using the standardized Authentication process, if the mobile phone has OTAPA capability, it responds with a Page Response Message, indicating support for the EF by sending the EF number. If the mobile station does not support the option, the response will indicate that the option is not available. Once the presence of the option is confirmed, the base station transmits a Channel Assignment Message, telling the mobile station to proceed to the Traffic Channel. In order to prevent unauthorized access to the mobile user's billing records, it may be desirable to use the Signaling Message Encryption (SME).

Once the mobile station is on the Traffic Channel, an OTASP Data Message is sent that an additional fee is charged for the use of the feature and requesting acknowledgment of acceptance. If accepted, a second OTASP Data Message is sent containing a Extended Feature Change Code (EFCC). If the EFCC matches the EFCC for the mobile station, it is verified by the mobile unit, after which it may be used to unlock the mobile station, update the featured code(s) and store the updated feature code(s) into the phone's memory. After verification of the programmed data in accordance with OTASP processing, the process is terminated. If the user refuses the additional billing, no downloading will occur. A number of different EFCCs may be used for different feature codes so that the user may elect the feature codes individually to avoid being billed for access to all possible optional extended features when only one is desired.

The above cited portion of Shah '065, similar to the cited portion of Moles, is silent with regard to provisioning of one or more parameters specific to updating of firmware and software in the electronic device, let alone to such a provisioning during provisioning of a NAM.

As an initial matter, the cited portion of Shah '065 does not mention provisioning of a NAM and therefore cannot disclose "...wherein one or more parameters specific to

updating of firmware and software in the electronic device are provisioned, during provisioning of a number assignment module (NAM) in the electronic device, by the network." In any event, the cited portion of Shah '065 does not disclose provisioning of one or more parameters specific to updating of firmware and software in the electronic device. Moreover, none of the activities described in the cited portion of Shah '065 occur during provisioning of a NAM, as required by claim 1.

For example, the cited portion states, "The mobile phone is pre-programmed with a service option for changing or adding extended subscriber features, which includes assignment of an Extended Feature (EF) number. The mobile phone will also have one or more extended feature change codes (EFCCs) in its memory." To the extent the Office Action is asserting that the "service option" of Shah '065 is "one or more parameters specific to updating of firmware and software," the "service option" is "pre-programmed" in the phone and therefore not provisioned by the network at all, let alone provisioned during provisioning of a NAM. To the extent the "Extended Feature (EF) number" and/or "extended feature change codes (EFCCs)" are being asserted as "one or more parameters specific to updating of firmware and software," Applicants note that the cited portion of Shah '065 does not mention provisioning of a NAM or provisioning of either the EF or EFCCs, instead mentioning a "service option for changing or adding extended subscriber features which includes assignment of an Extended Feature (EF) number," and does not appear to explain how such an assignment of an EF number would be accomplished, let alone disclose provisioning during a provisioning of a NAM. Regarding the features themselves, Shah '065, in the paragraph preceding the cited portion, states as follows:

In an embodiment in which the mobile user subscribes to a network feature for which a subscription fee is charged, such as enhanced vocoder capability, voice mail, voice dialing, or conference calling, the feature must be provisioned, when initially subscribed to, when the mobile user wishes to utilize the feature outside of his or her home network, and/or when the subscribed features are changed. Access to the feature, hereinafter referred to as an "extended feature", may be provided using the over-the-air

programming protocol and procedures which support the Over-The-Air Service Provisioning (OTASP) feature in accordance with established industry standards (TIA/EIA/IS-683) in a procedure for Over-The-air parameter Administration (OTAPA). A difference between the OTAPA and OTASP is that initiation of the OTAPA procedure does not require the intervention of the mobile user.

(Shah at 7:56-8:4; emphasis added). Thus, Shah '065 discusses the provisioning of a "feature" (such as "enhanced vocoder capability, voice mail, voice dialing, or conference calling") and not "one or more parameters specific to updating of firmware and software." In any event, the provisioning mentioned in Shah '065 occurs when the feature "is initially subscribed to, when the mobile user wishes to utilize the feature outside of his or her home network, and/or when the subscribed features are changed" - and not during the provisioning of a NAM. To the extent the cited portions of Shah '065 make any mention of provisioning, they do not make mention of provisioning a NAM, nor provisioning one or more parameters specific to updating of firmware and software in an electronic device, let alone to provisioning one or more parameters specific to updating of firmware and software in the electronic device during provisioning of a number assignment module (NAM) in the electronic device by the network.

As one further example of the patentable distinctness of the presently claimed subject matter, Applicants briefly turn to claim 6, which depends from claim 1. Claim 6, recites a network comprising, *inter alia*, "an update agent in the electronic device." (emphasis added). The Office Action asserts that this aspect of claim 6 is disclosed in Moles by the "update controller" of Fig. 3. (See Office Action at p. 7: "Regarding claim 6, Moles discloses a network ... further comprising: an update agent in the electronic device (i.e., update controller) (see fig. 3).") The update controller of Moles in Fig. 3, however, is not in the electronic device, but instead in a separate mobile station configuration server 160. (See Moles Fig. 2-3; see also *id.* at 6:12-16: "Mobile station configuration server 160 is a system-wide central server that is located remote from the other components of wireless network 100..."; see also *id.* at 6:55-57: "Mobile station configuration server 160 comprises mobile station (MS) update controller 305...")

Again, as discussed above, the gathering of configuration data and storage of that configuration data in a server in Moles is quite different than the presently claimed subject matter.

As discussed above, Applicants respectfully submit that neither Moles nor Shah '065 discloses, *inter alia*, "...wherein one or more parameters specific to updating of firmware and software in the electronic device are provisioned, during provisioning of a number assignment module (NAM) in the electronic device, by the network." As such, combining the two would not result in the subject matter claimed in claim 1, and any such combination does not teach or suggest that aspect of claim 1, either. As the Office Action provides no other explanation of where or how such a teaching or suggesting could be found, Applicants respectfully submit that the Office Action does not establish a *prima facie* showing of obviousness of claim 1 or any of claims 2-9 that depend from claim 1. Applicants further respectfully submit that Moles and Shah '065, either alone or in combination, do not teach, suggest, or otherwise render obvious claim 1, or any claims that depend from claim 1.

Rejection of Claims 11-15

With regard to independent claim 11, as well as claims 12-15 which depend from that claim, Applicants note that claim 11 recites a mobile electronic device network adapted to update electronic devices and perform over-the-air number assignment module parameter provisioning comprising, *inter alia*, "an electronic device comprising one of firmware and software, the electronic device also comprising number assignment module parameters specific to updating one or both of firmware and software." (emphasis added).

In asserting that Moles discloses "the electronic device also comprising number assignment module parameters specific to updating one or both of firmware and software," the Office Action asserts that Moles discloses "service provisioning initiates an over-the-air (OTA) process that activates in the cellular handset a Number

Assignment Module” and cites to Moles at col. 1:66 - 2:2. That cited portion of Moles reads as follows:

This procedure is known as “service provisioning.”
Service provisioning initiates an over-the-air (OTA) process
that activates in the cellular handset a Number Assignment
Module, which give the handset a unique phone...

The cited portion of Moles appears to discuss activation of a NAM as part of service provisioning, but does not teach or suggest the provision of any parameters specific to updating one or both of firmware and software. The mere mention of activating a NAM does not disclose number assignment module parameters specific to updating one or both of firmware and software, let alone an electronic device comprising such parameters. This is particularly so in light of the above discussion of the earlier cited portion of Moles, which, as discussed previously, relates to gathering configuration data from the electronic device, and not to provisioning one or more parameters specific to updating firmware and software. Thus, the cited portions of Moles do not teach, suggest, or otherwise render obvious the subject matter claimed in claim 11.

Applicant further respectfully submits that, for at least the reasons discussed in connection with claim 1, Shah '065 does not remedy the shortcomings in the disclosure of Moles with respect to the presently claimed subject matter's limitation of, for example “an electronic device comprising one of firmware and software, the electronic device also comprising number assignment module parameters specific to updating one or both of firmware and software.” As such, Applicants respectfully submit that the Office Action does not present a *prima facie* showing of obviousness for claims 11-15, and that Moles and Shah '065, either alone or in combination, do not teach suggest, or otherwise render obvious claims 11-15.

Rejection of Claims 16-23

Claim 16 is amended by the present response to include a limitation previously contained in claim 17. Namely, the method of amended claim 16 includes the limitation that the determining is performed “during an over-the-air parameter administration

operation for programming number assignment module parameters.” (Claim 17 is cancelled by the present response, and claim 18 is amended to depend directly from claim 16). The “determining” step of claim 16 recites “determining a value of one of a firmware update service option number and a software update service option number in the wireless communication device by the wireless network.”

Applicant respectfully submits that neither Moles nor Shah ‘065, either alone or in combination, teaches, suggests, or otherwise renders obvious a method of updating software in a wireless communication device performing such a determining step during an over-the-air parameter administration operation for programming number assignment module parameters, as claimed in claim 16.

In connection with now-cancelled claim 17, the Office Action states that Moles discloses a method “wherein determining is performed during an over-the-air parameter administration operation for programming number assignment module parameters (i.e., when an unprovisioned mobile station accesses wireless network, then BS and/or MSC, using the handset data in HLR, identifies MS as an unprovisioned handset and performs an over-the-air (OTA) service provisioning of the MS) (see col. 6, lines 28-39).” (Office Action at p. 18). Applicants respectfully traverse this assertion by the Office Action.

The portion of Moles cited by the Office Action, namely col. 6, lines 28-39, has been addressed previously in connection with claim 1. As an initial matter, it is not clear what “determining” the Office Action is asserting is performed in that cited portion of Moles. The cited portion does state, at one point, that BS (a base station controller) and/or MSC (a mobile switching center) “identifies MS 112 as an unprovisioned handset and performs an over-the-air (OTA) service provisioning of MS 112.” However, that “identif[ication]” of a mobile station as unprovisioned is not “determining a value of one of a firmware update service option number and a software update service option number in the wireless communication device by the wireless network,” as required by the presently claimed subject matter. As a result, the cited portion of Moles does not disclose the required determination, let alone the performance of the required

determination at the required time (i.e., during an over-the-air parameter administration operation for programming number assignment module parameters). Moreover, as discussed in connection with claim 1, even if, *arguendo*, the "service provisioning" of Moles disclosed provisioning of a NAM, the cited portion of Moles still does not provide the required "programming number assignment module parameters."

Nor does Shah '065 remedy the shortcomings of the teachings of Moles. For example, in connection with its discussion of the determining step of claim 16, the Office Action cites Shah '065 at col. 8, lines 5-48, which is the same portion previously discussed in connection with claim 1. Similar to the above discussion, that portion of Shah '065 does not discuss number assignment module parameters, let alone disclose an over-the-air parameter administration operation for programming number assignment module parameters, let alone "wherein determining is performed during an over-the-air parameter administration operation for programming number assignment module parameters." Instead, the cited portion of Shah '065 discusses, for example, a "service option for changing or adding extended subscriber features which includes assignment of an Extended Feature (EF) number."

From the above, neither the cited portions of Shah '065 nor Moles discuss programming number assignment modules as claimed by amended claim 16, let alone performing the "determining" step of claim 16 "during an over-the-air parameter administration operation for programming number assignment module parameters." For example, assuming *arguendo* that Shah '065 even disclosed the required determining step, the cited portion of Shah '065 takes place during the downloading of "updated feature code(s)" (see Shah '065 at 8:37-44) for an embodiment "in which the mobile user subscribes to a network feature for which a subscription fee is charged, such as enhanced vocoder capability, voice mail, voice dialing, or conference calling." (See *id.* at 7:56-59). Such a subscription feature is quite different from the programming of number assignment module parameters of the presently claimed subject matter.

Applicants therefore respectfully submit that Moles and Shah '065, either alone or in combination, do not teach, suggest, or otherwise render obvious independent claim 16, or claims 18-23 which depend therefrom.

Rejection of Claims 24-30

Moving next to claims 24-30, Applicants respectfully submit that Moles in view of Shah '065 does not render those claims obvious. Claim 24 is an independent claim from which claims 25-30 depend. Claim 24 is amended by the present response to recite a computer-readable storage having stored thereon a computer program having a plurality of code sections, the code sections executable by a processor for causing the processor to perform the operations comprising, *inter alia*, "receiving at least one message from a server over the wireless network as part of an over the air parameter administration process for programming number assignment module parameters, the message containing a service parameter."

Applicants respectfully submit that amended claim 24, along with claims 25-30 which depend therefrom, are allowable for at least the reasons discussed previously.

Conclusion

In general, the Office Action makes various statements regarding claims 1-16 and 18-30, and the cited references, that are now moot in light of the above. Thus, Applicants will not address such statements at the present time. However, the Applicants expressly reserve the right to challenge such statements in the future should the need arise (e.g., if such statements should become relevant by appearing in a rejection of any current or future claim).

The Applicants believe that all of claims 1-16 and 18-30 are in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, the Applicants invite the Examiner to contact the undersigned at (312) 775-8000 for an interview.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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